## Citrus Peelminer in Grapes







Citrus peelminer larva

Citrus peelminer pupa

Citrus peelminer adult (about 4 mm in length)

The citrus peelminer [Marmara gulosa Guillèn and Davis; Lepidoptera: Gracillariidae] began causing problems for the citrus industry in the San Joaquin Valley in 2000. Typically, this moth which is native to the southwestern United States and northern Mexico was considered only as a pest of citrus and most frequently found on a limited number of citrus varieties. However, the citrus peelminer in the 2000 San Joaquin Valley infestation is acting very differently. This insect has demonstrated a large expansion of its host range over that seen in the past. Included in this expansion of host range are grapes. Mining by the larvae can be found in the green canes, the rachises, and the berries. Although the infestation rate in the clusters is low, the citrus peelminer does pose a serious threat to the grape export market. Studies are currently underway to investigate the life history, biological control, and chemical control of the citrus peelminer. From these studies, management plans can be developed. For more information, please visit either <a href="http://plant.cdfa.ca.gov/biocontrol/">http://plant.cdfa.ca.gov/biocontrol/</a> or <a href="http://plant.cdfa.ca.gov/biocontrol/">www.uckac.edu/citrusent/citrus\_peelminer.htm</a>.















